A Quarter in Review

Databases
• What are the differences between a database and a normal file system?
• When should we use a database? When should we not?

ER Modeling and Diagramming
• Why do we do it?
  – Plan data layout before implementation
  – For later reference
• Can we always convert to a database?
  – Not always
• Pro tip
  – Compare it with the desired product
  – Check it off one by one if you need to
Data and Constraints

- Picking data types
- Placing constraints on data
  - Server side
  - Client side
- Foreign keys
- Pro tip
  - Don’t wait to add these things, people will find a way to break relationships!

Conversions from ER Diagrams

- Know how to go from your diagrams to your database
- Make sure your diagrams capture what you need
- Add stuff if you need to, but document it

Relational Algebra

- If you read a paper that is relevant, you have the basics to understand it
MySQL

• Only one language for databases
• Pick your system based on your needs
  – Does your project play with .NET?
  – Is it PHP based?
  – Do you need relationships?

When to Move Out of SQL

• SQL provides some functions
  – SUM
  – AVERAGE
  – MAX/MIN
• Often need to do additional work and that is OK
• SQL is just another tool

Normalization

• Keeping data consistent is important
• Being able to show it is true is also important
• It is a good tool to be able to complain about how bad past programmers were
Assignment Clarification

• Some of your websites are confusing
• If they are, you should add to the paper a walkthrough of how things work
• I redid the math and you probably should be aiming for 4-6 pages because you will probably be wanting to add screenshots and those take a lot of space

This Class

• Things I know
  – Feedback was slow and meh
  – Crash courses in web development are not fun
• How do I fix these things?
  – Multiple choice?
  – Fewer assignments?
  – Bigger groups?
  – Not require web work?

This Class Continued

• Things I may not know
• Feedback sandwich
  – What went well/what did you like?
  – What went bad?
  – What are some other things that went well?
Have a Good Break